

AMENDMENTS TO THE CLAIMS:

This listing of claims replaces all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A circuit arrangement for protecting an integrated semiconductor circuit comprising:

[[ - ]]a protection circuit,~~which contains a thyristor structure and is connected~~ located between an element to be protected and a reference potential, the protection circuit comprising a thyristor structure that includes active elements; and

[[ - ]] a control circuit configured to drive ~~for driving~~ the protection circuit[[.]] by generating ~~characterized in that the control circuit (TC; C1, R1, T 1 to 13) generates a plurality of control signals to which in each case drive~~ [[an]] one or more active elements (T1, T2) of the protection circuit. ~~(SCR).~~

2. (Currently Amended) The circuit arrangement ~~as claimed in~~ of claim 1, wherein ~~characterized in that the control circuit comprises~~ contains a detector circuit (R1, C 1), ~~which, on the input side, is connected in parallel with the protection circuit, and, in the case of a detection criterion being fulfilled, drives switching elements (I1 to 13) which generate the control signals.~~

3. (Currently Amended) The circuit arrangement ~~as claimed in claim 1 or 2~~ of claim 2, wherein ~~characterized in that~~ the detector circuit ~~comprises~~ contains a first resistive-capacitive (RC) element, the first RC element ~~(R1, C1)~~ comprising a resistor and a ~~capacitance~~ capacitor.

4. (Currently Amended) The circuit arrangement ~~as claimed in claim 2 or 3~~ of claim 21, ~~characterized in that~~ wherein the switching elements ~~comprise~~ contain inverters, ~~(11 to 13; 14 to 16).~~

5. (Currently Amended) The circuit arrangement ~~as claimed in claims 1 to 4~~ of claim 1, ~~characterized in that~~ wherein the active elements comprise active elements of different conductivity types and the plurality of control signals comprise a plurality of control signals for the active elements of different conductivity types, the control signals having of the protection circuit are of opposite polarities that are based on conductivity types of active elements, the control signals and each being configured to drive control inputs a control input of the active elements.

6. (Currently Amended) The circuit arrangement ~~as claimed in one of claims 1 to 5~~ of claim 2, ~~characterized in that~~ wherein the detector circuit of the control circuit is ~~designed for identifying~~ configured to identify a signal ~~rise~~ with a predetermined rise time at the element ~~(PV, LV)~~ to be protected.

7. (Currently Amended) The circuit arrangement ~~as claimed in one of claims 1 to 6 of~~  
claim 1, characterized in that wherein the control circuit ~~contains~~ comprises a plurality of time-  
dependent elements ~~(R1, C1; R10, C10, R20, C20) which~~ configured to determine ~~[[the]] a~~  
duration of ~~the~~ activation of the control circuit.

8. (Currently Amended) The circuit arrangement ~~as claimed in~~ of claim 7, characterized  
~~in that wherein~~ the time-dependent elements ~~are~~ comprise resistive-capacitive (RC) elements,  
~~(R1, C1; R10, C10, R20, C20) which are crucial on the one hand for the beginning of the~~  
activation and ~~On the other hand for the end of the activation of the control circuit.~~

9. (Currently Amended) The circuit arrangement ~~as claimed in~~ of claim [[2]] 21, wherein  
~~characterized in that~~ the detector circuit and the switching elements each comprise ~~are embodied~~  
~~with~~ individual transistors.

10. (Currently Amended) The circuit arrangement ~~as claimed in claim 2 or 9 of claim 2,~~  
wherein the detector circuit is configured to identify the identification of a signal rise with a  
predetermined rise time at the element ~~(PV, LV) to be protected,~~ the predetermined rise time  
being ~~predetermined as~~ a detection criterion of the detector ~~control~~ circuit.

11. (Currently Amended) The circuit arrangement ~~as claimed in claim 9 or 10 of claim~~  
10, wherein the control circuit comprises at least some ~~containing~~ time-dependent elements

~~(R13, C13; R10, C10, R20, C20)~~ which configured to determine the a duration of the activation  
of the control circuit.

12. (Currently Amended) The circuit arrangement ~~as claimed in one of patent claims 9 to~~  
~~11~~ of claim 10, wherein the detector circuit ~~containing~~ comprises at least one resistive-capacitive  
(RC) element, the at least one RC element (R10, C10) comprising a resistor and a capacitance  
capacitor, as time dependent element and a detector switching element (TD10)

13. (Currently Amended) The circuit arrangement ~~as claimed in one of patent claims 9 to~~  
~~12~~ of claim 3, further comprising:

switching elements;

driver elements connected to the switching elements, and

a second resistive-capacitive (RC) circuit, wherein a [[the]] connecting node between the  
detector circuit and the switching elements ~~being~~ is electrically connected to the second ~~at least~~  
~~one further RC element, (R30, C30), which is crucial for the duration of the activation of the~~  
~~control circuit.~~

14. (Currently Amended) The circuit arrangement ~~as claimed in one of patent claims 9~~  
~~to 13~~ of claim 13, wherein the detector circuit ~~being embodied from~~ comprises two detector  
subcircuits, each of the detector subcircuits configured to ~~which in each case~~ drive a switching  
element for the active elements of the protection circuit.

15. (Currently Amended) The circuit arrangement ~~as claimed in one of patent claims 9 to 14,~~ of claim 21, wherein the switching elements being embodied in comprise individual metal oxide semiconductor (MOS) transistors, or bipolar transistors (TH1, TL1; TH10, TL10).

16. (Currently Amended) The circuit arrangement ~~as claimed in one of patent claims 9 to 15 of claim 1,~~ further comprising switching elements and driver elements, the switching elements being electrically connected to the driver elements, (T12, T13) being connected upstream of the switching elements.

17. (Currently Amended) The circuit arrangement ~~as claimed in one of claims 1 to 17 of claim 1,~~ wherein [[the]] control inputs of the active elements of the protection circuit being embodied in comprise a semiconductor structure that includes by means of wells of different conductivity types, the wells including in which are arranged highly doped regions for [[the]] output circuits of the active elements (-T1, T2).

18. (Currently Amended) A method for protecting an integrated semiconductor circuit ~~with a circuit arrangement as claimed in one of patent claims 1 to 18,~~ the method comprising:

detecting ~~in which the~~ a state of an ~~the~~ element (PV, LV) to be protected using a protection circuit located ~~connected~~ between the element to be protected and a reference potential, the protection circuit comprising a thyristor structure that includes active elements; is detected and

using a control circuit to generate ~~(TC; Cl, R1, I1 to 13)~~ generates a plurality of control signals based on ~~[[the]]~~ a detected state of the element to be protected; and  
communicating the control signals ~~which are in each case fed~~ to a control input of the active elements ~~(T1, T2)~~ of the protection circuit.

19. (New) The circuit arrangement of claim 8, wherein the RC elements are configured to generate control signals for controlling a beginning of activation and an end of activation of the control circuit.

20. (New) The circuit arrangement of claim 9, wherein the switching elements each comprise individual bipolar transistors.

21. (New) The circuit arrangement of claim 2, wherein upon detection of a detection criterion, the control circuit is configured to drive switching elements that are configured to generate the control signals.